

COMMONWEALTH OF KENTUCKY
BEFORE THE
PUBLIC SERVICE COMMISSION OF KENTUCKY

RECEIVED

MAR 21 2014

**PUBLIC SERVICE
COMMISSION**

IN THE MATTER OF

**INTEGRATED RESOURCE PLANNING REPORT
OF KENTUCKY POWER COMPANY TO THE
KENTUCKY PUBLIC SERVICE COMMISSION**

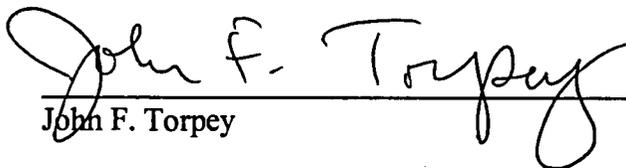
)
) **Case No. 2013-00475**
)

**KENTUCKY POWER COMPANY RESPONSES TO
COMMISSION STAFF'S SECOND SET OF DATA REQUESTS**

March 21, 2014

VERIFICATION

The undersigned, John F. Torpey, being duly sworn, deposes and says he is the Director Integrated Resource Planning for American Electric Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge and belief



John F. Torpey

STATE OF OHIO

)

) Case No. 2013-00475

COUNTY OF FRANKLIN

)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by John F. Torpey, this the 14th day of March 2014.



Notary Public



JOSEPHINE CONER
Notary Public, State of Ohio
My Commission Expires 09-20-16

My Commission Expires: 09-20-2016

Kentucky Power Company

REQUEST

Refer to page ES-2 of the Executive Summary and page 98, Section 3.5.2 of Kentucky Power's 2013 Integrated Resource Plan ("IRP").

- a. Provide a copy of the study which leads to the assumption that utility-scale solar power will begin to be economical.
- b. Explain whether the underlying factors that drive the viability utility-scale solar power are technology improvements in solar panels, generation price differentials, installation costs, or something different.
- c. Explain where the solar installation will be located.

RESPONSE

- a. The Company is contractually prohibited from reproducing the Navigant study. The Company will produce the documents for review at its Frankfort, Kentucky offices, located at 101A Enterprise Drive, at a mutually agreed time. The Navigant study forecasts declining solar costs through 2018.
- b. The factors driving the viability of solar resources are technology improvements, lower installation costs and increasing capacity and energy costs. See Figure 12 on page 131 of the IRP Report.
- c. Kentucky Power has not identified any sites for future solar installations.

WITNESS: William K Castle

Kentucky Power Company

REQUEST

Refer to page ES-2 of the Executive Summary regarding a carbon tax of \$15-\$20 per metric ton of CO₂, page ES-3, third paragraph stating "... and reflecting emerging preference for, and the viability of customer self-generation" and page 13, Section 1.6 of Kentucky Power's 2013 IRP.

- a. Explain the effects on electricity demand and energy prices for each customer class when the tax is applied.
- b. Explain how the tax revenue is used by Kentucky Power in its modeling, including, but not limited to, whether it is used to fund specific Energy Efficiency ("EE") or Demand-Side Management ("DSM") programs that could have a longer-lasting impact on demand.
- c. Explain whether the sensitivity of large commercial and industrial customer classes to energy prices is such that customers may leave the service area or fail to invest in additional expansion projects or new facilities if a carbon tax were to be imposed.
- d. If known, provide the tipping point at which the carbon tax becomes too high and elicits a significant reduction in electricity demand, including the secondary loss effects from business activity and employment losses.
- e. Explain whether the sensitivity of large commercial and industrial customer classes is such that they would undertake to self-generate all or a portion of their power requirements, i.e., combined heat and power ("CHP").

RESPONSE

- a. No specific analysis by customer class has been performed. In general, electricity demand tends to decrease as prices increase.
- b. The carbon tax is assumed to be a government-imposed penalty applied to the variable cost of fossil fuel based on the amount of CO₂ emitted. The IRP modeling does not assume any of this penalty will be used to offset costs of other resources.

- c. Kentucky Power has not performed any analysis to indicate whether large industrial or commercial customers would leave the service area or fail to invest in additional expansion projects. Such decisions would be made by those customers on a case by case basis taking into account a wide variety of factors, including the availability of skilled labor, and transportation to markets. It is important to realize also that any carbon tax proxy, if ultimately implemented, would likely affect electric generation throughout the entire United States.
- d. The Company has not calculated a tipping point.
- e. Any decision by a customer to self-generate would be made by that customer on a case by case basis, taking into account such variables as the anticipated price of power that would be avoided, the customer's load factor, availability of fuel sources, ability to finance such a project, and the impact those combined factors would have on its overall profitability.

WITNESS: John F Torpey

KENTUCKY POWER COMPANY

REQUEST

Refer to page ES-5 of the Executive Summary of Kentucky Power's 2013 IRP.

- a. Since it self-supplies its power in PJM Interconnection, L.L.C. ("PJM"), explain how and the extent to which PJM energy market volatility affects Kentucky Power.
- b. Explain how the addition of non-traditional energy resources, especially higher-cost biomass and utility-scale solar, is a suitable cost-effective hedge against that volatility.

RESPONSE

- a. Energy market volatility affects a vertically-integrated utility like Kentucky Power during those periods it lacks available resources to meet its internal load. These include periods when capacity is not in service due to maintenance or forced outages and demand exceeds the remaining supply, or when Kentucky Power possesses adequate supply but market prices are low so off system sales revenues are reduced.
- b. Non-traditional resources are typically not subject to the same price volatility as conventionally fueled units due to the nature of their fuel supply or power purchase agreements. As such, their relatively fixed costs have a stabilizing impact on overall system costs, acting as a hedge against volatility.

WITNESS: John F Torpey

Kentucky Power Company

REQUEST

Refer to footnotes (F) and (G) in Table ES-1 at page ES-7 of the Executive Summary. Explain why PJM and Kentucky Power recognize only 13 percent of wind nameplate MW rating for Installed Capacity ("ICAP") purposes, but recognize solar nameplate MW rating at 38 percent.

RESPONSE

The differing ratings are assigned by PJM to a resource based upon its actual performance at the time of the PJM peak, if known. Where operating data is unavailable for a particular unit, PJM assigns the rating based on PJM's experience with that type of resource at PJM's peak. Refer to PJM Manual 21: Rules and Procedures for Determination of Generating Capability, Appendix B: Calculating Capacity Values for Intermittent Capacity Resources, Section B.3 paragraph "j". on page 19 (link: <http://www.pjm.com/~media/documents/manuals/m21.ashx>)

Kentucky Power must use the PJM values to receive credit for those resources in meeting its reserve obligations.

WITNESS: John F Torpey

Kentucky Power Company

REQUEST

Refer to page 7, Section 1.4, of Kentucky Power's 2013 IRP. A key assumption supporting the forecast is the slow decline in service-area population.

- a. Provide the percentage of Kentucky Power's overall load (capacity and energy) that is contributed by coal mining and related industries.
- b. Explain how the recent decline in coal mining and related industries and the loss of business activity and employment generally in eastern Kentucky have affected Kentucky Power, if at all.

RESPONSE

- a. In 2013, energy sales to coal mines constituted 10.2% of the Company's retail sales. Energy sales to coal mine related industries are not readily available. Coal mining activities accounted for 7.7% of the Company's 2013 peak internal demand.
- b. The direct impact on Kentucky Power is reduced energy sales and revenues associated with the coal mining industry. The reduced mining activity, if not offset by other growth, may affect regional income, which has an impact on residential and commercial activity.

WITNESS: William K Castle

Kentucky Power Company

REQUEST

Refer to page 9, Section 1.4, of Kentucky Power's 2013 IRP.

- a. Explain why Kentucky Power's interruptible load is assumed to be not available for interruption at the time of seasonal peaks.
- b. Explain when the interruptible load is available.
- c. Identify and describe the advantages to Kentucky Power of having an interruptible tariff if the interruptible load is not available during times when power prices are presumably very high.
- d. Explain whether Kentucky Power has had to go to the market to make power purchases at a time when the interruptible load was not available.

RESPONSE

- a. Kentucky Power has one interruptible customer under a Commission-approved Tariff C.S.-I.R.P. contract. That contract also includes time-of-day provisions that generally led to that customer only operating its interruptible load during off-peak periods. As such, the customer's interruptible load was not contributing to the Company's seasonal peaks, and hence could not be interrupted.
- b. Interruptible load is available when the customer is operating above its firm capacity load level.
- c. By "not available" the Company means that the load has been interrupted by the customer for reasons other than Kentucky Power directing the customer to interrupt the load. If the interruptible load is not operating at a time of need, then by definition it is already reduced and the desired goal has already been achieved. Further, to the extent the load has not been interrupted by the customer at the time of the peak, the interruptible tariff allows the Company to require that the load be interrupted thereby providing the sought-after benefits.

- d. As a member of PJM, Kentucky Power is continuously bidding all of its generation into the PJM market and meeting all of its load through purchases from the PJM market. As a result, the Company lacks the information to respond further to this data request.

WITNESS: William K Castle

Kentucky Power Company

REQUEST

Refer to page 13, Section 1.6, Table 5, of Kentucky Power's 2013 IRP.

- a. Explain the cause of the drop in peak demand in 2017.
- b. Examining peak demand beginning in 2022, it does not appear that the carbon tax of \$15-\$20 per metric ton of CO₂ has any effect. Explain whether the tax has an appreciable effect on demand levels, peak or otherwise.
- c. What is the price elasticity of demand used in modeling demand levels, peak or otherwise?
- d. Explain whether Kentucky Power modeled the effects of a carbon limit implemented in a non-tax form, such as a CO₂ rate or mass-emission limit, and, if so, explain how that affected peak demand.

RESPONSE

- a. The drop in 2017 reflects the transition from the PJM-based forecast (which ends in May 2017) for UCAP load to the Company-based forecast for UCAP load.
- b. The Company does not explicitly forecast the impacts of a carbon tax on the internal peak demand forecast, which is used, derive the UCAP peak demands that are referred to on Table 5
- c. There is no elasticity of demand for peaks in the Company's analysis. The Company does not have a single price elasticity for its energy sales, rather each sector will have an elasticity or elasticities.
- d. No. A carbon limit was not explicitly modeled for the internal peak demand forecast.

WITNESS: William K Castle

KENTUCKY POWER COMPANY

REQUEST

Refer to pages 16 and 19, Sections 1.7 and 1.9.2, of Kentucky Power's 2013 IRP.

- a. Explain whether Kentucky Power has held discussions of EE programs with its industrial customers.
- b. Explain whether CHP could be considered an EE program.
- c. Explain whether there is any reason why Kentucky Power could not spend a portion of its \$6 million annual budget by 2016, in conjunction with its industrial customers' funds, to implement EE programs that may otherwise not be considered by industrial customers individually.

RESPONSE

- a. Since the time industrial customers opted out of participating in the Company sponsored DSM/EE initiative and the Company eliminated all industrial programs, the Company has not held discussions of EE programs with its industrial customers.
- b. CHP is better considered an energy resource rather than an EE/DSM program.
- c. KRS 278.285(3) requires that the portion of the \$6 million that would be used to implement EE projects for industrial customers must be funded by a surcharge levied on all industrial customers. Kentucky Power's current DSM tariff is not applicable to industrial customers and thus no funds would be available under the current tariff for such industrial EE programs. Assuming that the Company's tariff is amended to levy an appropriate surcharge on industrial customers, and subject to review and approval by the commission of the specific "EE program(s) that may otherwise not be considered by industrial customers individually," the Company believes that the industrial-funded portion of the \$6 million could be used to fund an EE program applicable to industrials as a class. In this regard, the Company notes that a CHP in most cases would not constitute an EE program available to all industrial customers because it would be limited to a single industrial customer.

WITNESS: Ranie K Wohnhas

Kentucky Power Company

REQUEST

Refer to pages 20-21, Section 1.9.2, of Kentucky Power's 2013 IRP. The Supreme Court is considering questions regarding the United States Environmental Protection Agency's ("EPA") authority to regulate Greenhouse Gases ("GHG") currently. Decisions in those cases are expected by the summer of 2014.

- a. Explain what options are available to Kentucky Power if GHG regulations go into effect and existing sources are limited to 1,100 pounds of CO₂ per MWh.
- b. If these options were to be put into effect, and if Kentucky Power has modeled the question, provide the cost impact on Kentucky Power's various customer classes.

RESPONSE

- a. While there is no indication that existing sources would be limited to 1,100 pounds of CO₂/MWh, if such a rule were to be implemented, it would likely apply to all coal fired plants in the country. The options available to these plants would be to shut down/retire, to install carbon capture equipment (which has not yet been demonstrated on a commercial scale), or to convert to natural gas fired operation.
- b. Kentucky Power has not modeled the options to address a hypothetical 1,100 pounds of CO₂/MWh GHG restriction.

WITNESS: John F Torpey

Kentucky Power Company

REQUEST

Refer to pages 14-15, Section 1.6, Tables 5 and 6, and page 72, Section 2.13, Exhibit 2-18, of Kentucky Power's 2013 IRP. Explain the discrepancy in summer peak forecasts in Table 5 and Exhibit 2-18.

RESPONSE

The forecasts on Table 5 reflect Unforced Capacity (UCAP) peaks for PJM capacity planning purposes. The peaks on Exhibit 2-18 reflect the internal peak demand.

WITNESS: William K Castle

Kentucky Power Company

REQUEST

Refer to page 93, Section 3.4.1.5, of Kentucky Power's 2013 IRP and the response to Item 24 of the Commission Staff's Initial Request for Information ("Staff's First Request"). Explain how the Distributed Generation ("DG") technologies were evaluated, i.e., were the analyses based upon and inclusive of the cost to induce customers to install and use the technology or based upon the simple installation and operation and maintenance costs?

RESPONSE

DG technologies were evaluated on their cost to the utility (net metering credits). Customer-incurred costs were not considered.

WITNESS: William K Castle

Kentucky Power Company

REQUEST

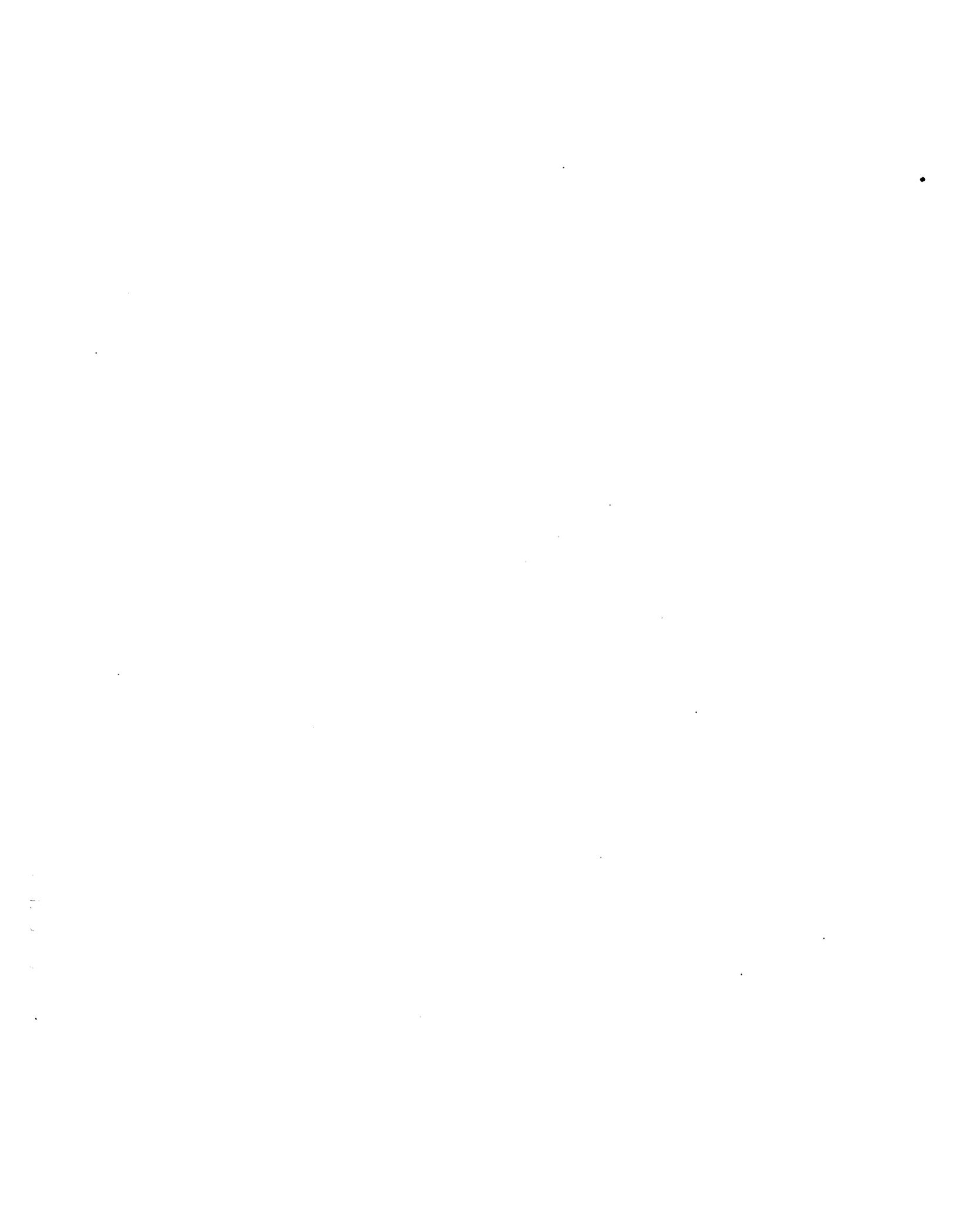
Refer to page 97, Section 3.5.2, of Kentucky Power's 2013 IRP. Kentucky Power states, "DG resources were evaluated using a solar PV resource, as this is likely the primary distributed resource." Explain how Photo Voltaic compares to CHP as a DG resource in terms of cost, capacity and energy.

RESPONSE

CHP costs depend on the type of facility constructed. Steam turbine CHP plant costs typically run \$2,000-3,000/kW. Gas turbine CHP costs start at \$1,000/kW for a simple installation and can quintuple for more complex installations. In contrast, solar PV systems are expected to cost \$1,350/kW (including Investment Tax Credit) by 2020, while utility wind costs are expected to be \$2,000/kW. Capacity credit, or the amount of PJM capacity offset is dependent on the operating characteristics of the CHP plant. Attachment 1 to KPSC 2-12 shows a typical range of installed costs. The cost to the utility (and ratepayers) of a CHP plant is the full retail rate (less variable O&M) for the portion of energy consumed that is self-generated and the co-gen rate for energy sold to the grid.

WITNESS: William K Castle

	Installed Cost \$/kW	Capacity Factor	PJM Capacity
Utility Wind	2000	30-40%	13%
Solar PV	1350	15-18%	38%
CHP	1000-5000	70-80%	various



Kentucky Power Company

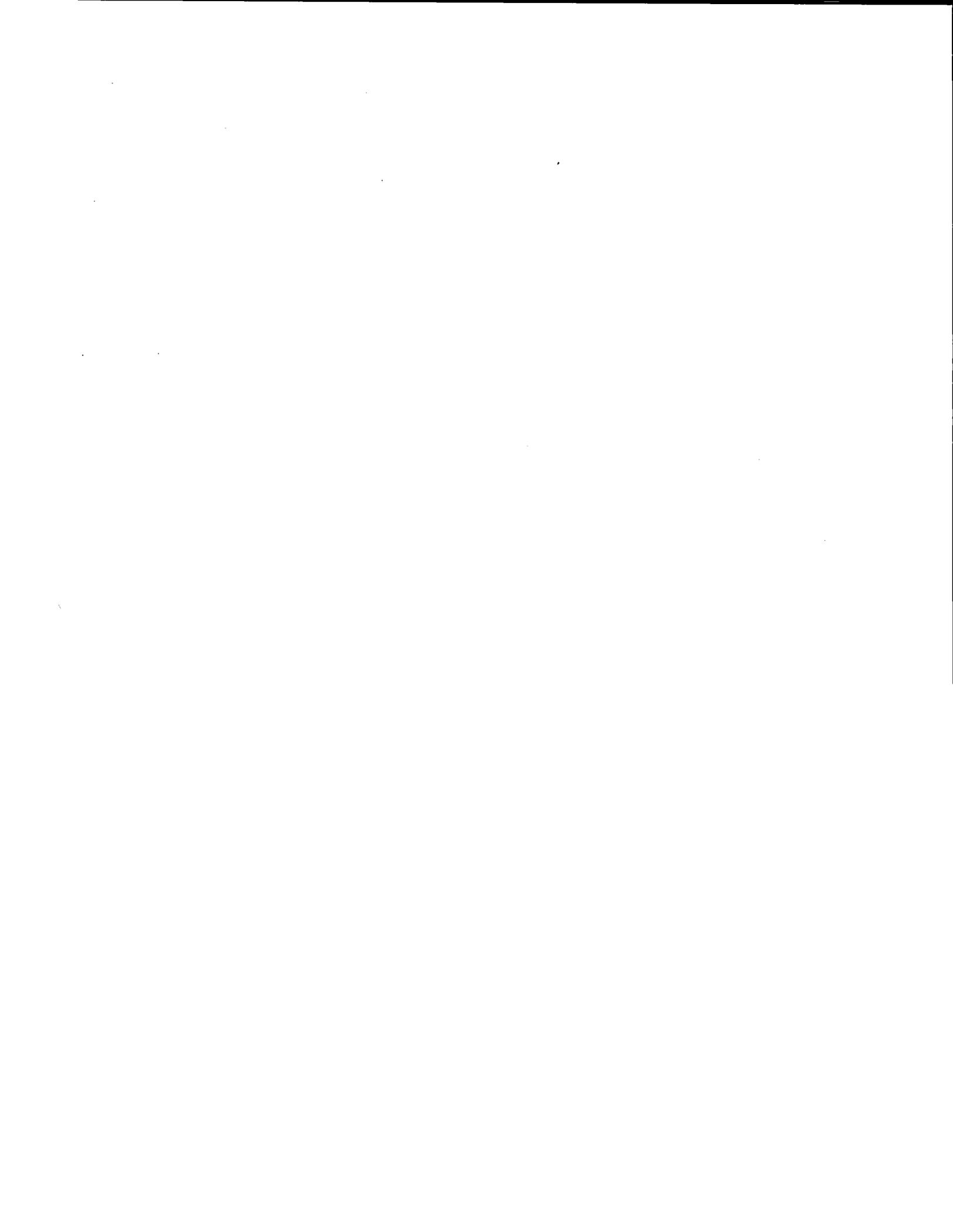
REQUEST

Refer to page 98, Section 3.5.5, of Kentucky Power's 2013 IRP. Kentucky Power states, in part, "Resources were constructed with the following cost profiles (Stated in "cost first-year savings"). . . ." Explain whether "first-year savings" means the first year of the DSM program implementation, the first year of resource installation, or something different.

RESPONSE

Those costs are stated for the first year of resource installation.

WITNESS: William K Castle



Kentucky Power Company

REQUEST

Refer to page 125, Section 4.3.4.2, pages 136-137, Section 4.3.4.5, of Kentucky Power's 2013 IRP and the response to Item 40 of Staff's First Request. Kentucky Power's discussion takes as a premise that CHP would be aggressively pursued only when there would be a need for additional capacity, and that its avoided costs have been lower than the cost of energy from CHP.

- a. Explain why this line of reasoning (business model) is appropriate for CHP, when utility-scale wind and solar are not priced on a similar basis.
- b. Explain whether the American Electric Power operating companies ("AEP companies") take advantage of the 3,400 MW of potential CHP in their service territories, and if so, to what degree.
- c. If the AEP companies take advantage of CHP in their service territories, provide the locations, the industry type (refining, chemical, etc.) and whether the state is a traditional utility regulation or a deregulated state.
- d. Explain why a business model that approaches CHP as a part of a utility's investment in supply-side resources on par with other more traditional options is not valid.
- e. From an industrial customer point of view, the CHP business case analysis will be different. In a traditional utility-regulation state, investing in CHP will be undertaken predominately to avoid large current and anticipated utility energy bills. Considering the impact of the loss of its two largest industrial loads, Big Rivers Electric Corporation has had to take drastic actions and is in the process of implementing large rate increases. Explain whether Kentucky Power has calculated the impact to itself and its remaining ratepayers of the loss of a large industrial load to CHP. If not, explain why it would not be prudent to model this type of loss scenario as part of its risk analysis.
- f. Provide an analysis of the impact to Kentucky Power and resulting ratepayer impact if a large industrial customer in its service territory were to decide to generate its own power, resulting in a 10 percent loss of load.

- g. If wind is only evaluated at a 13 percent useful-capacity factor and utility-scale solar has approximately a 38 percent capacity factor, and both are either being either evaluated or anticipated by Kentucky Power, explain the business-case rationale for not pursuing CHP.
- h. Explain whether there is any reason why Kentucky Power could not be a partner/investor in a CHP project.

RESPONSE

- a. Wind and solar are added because they are projected to become economic during the study period. That is, the cost to produce energy and capacity are less than the PJM market prices, resulting in reduced revenue requirements. CHP is compensated at avoided cost which is the PJM market and is open to anyone willing to produce power at that rate. To the extent that a CHP facility can produce power at a rate that is less than the market rate, that may influence the decision to build. CHP, like solar and wind, are being offered, in effect, at the market price.
- b. AEP has 3,402 MW of CHP capacity in its service territories. AEP offers the "co-gen" or "avoided cost" rate for purchase of excess energy from the CHP facility.
- c. See Attachment 1.
- d. CHP is a valid resource option on par with supply-side and other demand-side resources. There is a mechanism to compensate CHP providers at market prices for their excess production. Internal production effectively offsets electricity purchases at the full retail rate. This is different than a model that builds generation that is producing energy at below-market rates.
- e. The Company has not made the indicated calculation. Kentucky Power recognizes the importance of including at the appropriate time such a loss scenario in its planning. Nevertheless, because of differences between the distribution of Kentucky Power and BREC's load, and because CHP is customer specific, it would be more useful to model this type of loss scenario at the time a customer is considering CHP.

- f. The extreme example of a 10% load loss as a result of one customer generating its own power would result in an approximate annual jurisdictional revenue loss of \$5 million. This loss could be offset to some extent by additional off-system sales of the load loss; and on a longer term perspective, it provides room for economic development without the need for additional generation. Using 2013 total jurisdictional revenue of \$511 million, the \$5 million revenue loss would be 1% of the Company's total jurisdictional revenue. Spreading this revenue loss equally across all of KPC's customers would result in an annual increase of \$29 dollars or \$2.42 per month.

- g. CHP is "pursued" through the tariff mechanism to compensate CHP providers at market rates, including energy and capacity. Wind and solar could be pursued to the extent that they are providing energy and capacity at less than market rates resulting in reduced revenue requirements. The combination of useful capacity and the timing (seasonally and peak/off-peak hours) determine the value of the resource. To the extent those market prices can be beat due to declining costs, as is the case in solar and wind, those resources become preferable.

- h. Kentucky Power could partner with a potential CHP provider. The considerations would be the extent that such an investment would increase revenue requirements for rate-payers.

WITNESS: William K. Castle/Ranie K. Wohnhas

AEP_SERV Y

Sum of Capacity kW		Fuel Type								
STATE	APPLICATION	BIDMASS	COAL	NG	DIL	OTR	WAST	WDDD	Grand Total	Utility Regulation
AR	Hospitals/Healthcare Pulp and Paper			8,500			156,500		8,500 156,500	Regulated Regulated
AR Total				8,500			156,500		165,000	Regulated
IN	Amusement/Recreation Colleges/Univ. Food Processing Hospitals/Healthcare Misc. Manufacturing Primary Metals		23,100	120 30 2,000 745 210 120					120 23,130 2,000 745 210 120	Regulated Regulated Regulated Regulated Regulated Regulated
IN Total			25,100	1,225					26,325	Regulated
LA	Military/National Security Pulp and Paper			300					300 94,800	Regulated Regulated
LA Total				95,100					95,100	Regulated
MI	Agriculture Colleges/Univ. Pulp and Paper	80		10,583 13,010					80 10,583 13,010	Regulated Regulated Regulated
MI Total		80		23,593					23,673	Regulated
DH	Agriculture Amusement/Recreation Colleges/Univ. Furniture General Gov't Primary Metals Private Household Pulp and Paper Refining Rubber/Plastics Wastewater Treatment	1,150	375	150			32,000	1,000	1,150 150 375 1,000 375 36,550 115 103,450 53,000 1,900 90	Deregulated Deregulated Deregulated Deregulated Deregulated Deregulated Deregulated Deregulated Deregulated Deregulated Deregulated
DH Total		1,615	81,375	29,165			85,000	1,000	198,155	Deregulated
DK	District Energy Pulp and Paper Refining			17,000			55,000 16,800		17,000 55,000 16,800	Regulated Regulated Regulated
DK Total				17,000			71,800		88,800	Regulated
TN	Chemicals Pulp and Paper		160,300 22,000						160,300 22,000	Regulated Regulated
TN Total			182,300						182,300	Regulated
TX	Chemicals Food Processing Hotels Pulp and Paper Refining Wood Products	23,500		1,747,400	240		65,000 75,300	5,540	1,747,400 23,500 240 65,000 781,100 5,540	Deregulated Deregulated Deregulated Deregulated Deregulated Deregulated
TX Total		23,500		2,418,200	240	35,000	140,300	5,540	2,622,780	Deregulated
Grand Total		25,195	288,775	2,592,783	240	35,000	453,600	8,540	3,402,133	

Kentucky Power Company

REQUEST

Refer to projected average heat rates (Btu/kWh) for Big Sandy Unit 1 after conversion listed in Exhibit 4-6, page 3 of 3, at page 267 in Volume D of Kentucky Power's 2013 IRP. Also refer to Kentucky Power's response to Item 10.c. of Commission Staff's Initial Information Request in Case No. 2013-00430 (See footnote below) concerning the calculated full heat rate (summer) for Big Sandy Unit 1 after conversion. Explain any differences in the heat rate(s) in the two referenced documents.

2013-00430, The Application of Kentucky Power Company for (1) A Certificated of Public Convenience and Necessity authorizing Kentucky Power to Convert the Existing Big Sandy Unit 1 to be Exclusively Fueled by Natural Gas (2) for Declaratory Rulings; and (3) For All Other Required Approvals and Relief, filed Dec. 6, 2013.

RESPONSE

The average heat rates produced in the 2013 IRP were based on the *Plexos*/LT Plan dispatch algorithms which differ from those used by Strategist to produce the average heat rates for the 2013-00430 case. In addition, multiple factors combined to result in a higher average heat rate as shown in the 2013 IRP versus the 2013-00430 case. The 2013 IRP inadvertently made use of an i/o curve that had an incorrect incremental coefficient, resulting in a higher average heat rate. In addition, the average heat rates produced shown in the 2013 IRP were based on a more recent projection of gas prices that were about 9% higher yielding a lower utilization of the Big Sandy 1 gas unit. This, in turn, resulted in a higher average heat rate. Nevertheless, the design heat rate for Big Sandy 1 has not changed from the original estimate.

WITNESS: John F Torpey

Kentucky Power Company

REQUEST

Refer to the response to Item 3 of Commission Staffs First Request.

- a. When was Kentucky Power's Automated Meter Reading ("AMR") system installed?
- b. Describe Kentucky Power's long-term plans for continued operation of its AMR system.
- c. Explain whether Kentucky Power intends to deploy smart meter technology in the future.
- d. Provide the number of disconnections and reconnections in 2013 due to non-payment of the customer bill.

RESPONSE

- a. Kentucky Power installed an Automated Meter Reading (AMR) system beginning in 2005. Most residential meters were replaced by 2007 and most commercial and industrial meters were replaced by 2010.
- b. Kentucky Power has no plans at this time to make any significant changes to its continued operation of its AMR system.

- c. Kentucky Power does not have any near-term plans to deploy AMI technology. Due to Kentucky Power's relatively recent investment in the AMR system, many of the operational benefits that would be realized through an AMI deployment have already been realized through the AMR system (e.g., remote meter reading). In addition, even though Kentucky Power's electricity rates remain below the national average, its customers are experiencing rate increases to reimburse the Company for increased costs of fuel, emission reduction requirements, increased costs to ensure electricity reliability investments, etc. These increased costs, along with a continuing economic downturn, have placed pressures on Kentucky Power to limit further incremental cost increases, including those related to smart meter deployment. Due to these factors, and being cognizant of associated rate impacts on customers, Kentucky Power is prudently pursuing only select smart grid technology deployment opportunities (such as SCADA, Distribution Automation, Volt VAR Optimization, etc.) at the current time. Kentucky Power will continue to consider the opportunities for smart meter deployment in the future.
- d. In 2013, Kentucky Power disconnected 10,783 customers due to non-payment of bills and reconnected 7,194 customers after past due balances had been paid.

WITNESS: Ranie K Wohnhas

Kentucky Power Company

REQUEST

Refer to the response to Item 11 of Staff's First Request. Explain what is meant by "recent trends in estimated losses."

RESPONSE

Recent trends in "estimated losses" means those loss percentages that have occurred since 2009 and which were used in estimating Company losses.

WITNESS: William K Castle

Kentucky Power Company

REQUEST

Refer to the response to Item 16 of Staff's First Request and Table 13 on page 108 of Kentucky Power's 2013 IRP.

- a. Provide the amount and percentage of Kentucky Power's projected annual investment in DSM relative to annual retail electric sales revenue for the years 2014 through 2028.
- b. Provide the amount and percentage of Kentucky Power's projected annual DSM/EE savings relative to total retail electric sales (in kWh) for the years 2014 through 2028.

RESPONSE

- a. Please see Attachment 1 to this response.
- b. Please see Attachment 2 to this response.

WITNESS: William K. Castle

All values in \$000 unless noted

Year	Distributed Solar (Net Metering)	VVO	Energy Efficiency	Total	Total Revenues	R&C Revenues	% of Total Revenues	% of R&C Revenues
2014	-	618	4,124	4,742	523,144	347,531	0.9%	1.4%
2015	-	618	5,158	5,776	530,384	350,424	1.1%	1.6%
2016	139	618	5,776	6,533	536,919	353,601	1.2%	1.8%
2017	189	618	5,871	6,678	551,754	361,137	1.2%	1.8%
2018	241	618	5,988	6,847	556,806	363,658	1.2%	1.9%
2019	295	618	6,108	7,021	564,479	367,637	1.2%	1.9%
2020	403	618	6,230	7,251	574,756	372,926	1.3%	1.9%
2021	511	618	6,355	7,484	585,417	378,726	1.3%	2.0%
2022	678	1,086	6,482	8,246	597,488	384,361	1.4%	2.1%
2023	851	1,086	6,611	8,548	601,217	386,284	1.4%	2.2%
2024	1,089	1,086	6,744	8,919	613,242	394,010	1.5%	2.3%
2025	1,383	1,086	6,879	9,348	625,506	401,890	1.5%	2.3%
2026	1,749	1,086	7,016	9,851	638,017	409,928	1.5%	2.4%
2027	2,244	1,086	7,156	10,486	650,777	418,127	1.6%	2.5%
2028	2,889	1,086	7,300	11,275	663,792	426,489	1.7%	2.6%

All values in GWh unless noted

	Expanded EE	Approve d EE	VVO	Distributed Solar (Net Metering)	Total	Retail Sales	Retail Sales R&C only	% of Retail Sales	% of R&C
2014	5	46	24	-	76	6,495	3,656	1.2%	2.1%
2015	14	61	24	-	100	6,503	3,654	1.5%	2.7%
2016	24	73	24	2	123	6,530	3,667	1.9%	3.3%
2017	34	81	24	2	142	6,547	3,670	2.2%	3.9%
2018	44	87	24	3	158	6,553	3,672	2.4%	4.3%
2019	54	92	24	3	173	6,563	3,679	2.6%	4.7%
2020	64	94	24	4	187	6,574	3,681	2.8%	5.1%
2021	74	96	47	5	222	6,593	3,689	3.4%	6.0%
2022	84	97	47	7	234	6,615	3,694	3.5%	6.3%
2023	93	97	47	8	245	6,633	3,701	3.7%	6.6%
2024	100	97	47	10	254	6,649	3,711	3.8%	6.8%
2025	105	97	47	13	261	6,666	3,723	3.9%	7.0%
2026	109	97	47	16	268	6,686	3,734	4.0%	7.2%
2027	113	97	47	20	276	6,705	3,745	4.1%	7.4%
2028	116	97	47	25	284	6,728	3,760	4.2%	7.6%

Kentucky Power Company

REQUEST

Refer to the response to Item 29.c. of Staff's First Request. Kentucky Power states that as a Fixed Resource Requirement ("FRR") company in PJM, it has been held to a lower reserve margin requirement, not higher. As an FRR company, Kentucky Power is obligated to meet its winter peak, plus a reserve margin. As a Reliability Pricing Model ("RPM") company in PJM, it would be required to have enough capacity for a summer peak, plus a reserve margin. If it were to choose to participate in PJM as a RPM member, what does Kentucky Power estimate its PJM summer RPM capacity plus reserve margin would be, stated in MWs?

RESPONSE

As an FRR company, Kentucky Power is obligated to meet its summer peak demand, coincident with the PJM summer peak (not the winter peak as stated in the question). For the 2017/2018 planning year, based on the PJM forecast that was made available to the Company on February 1, 2014, Kentucky Power, if participating in PJM as a RPM entity, estimates that its summer capacity plus reserve margin obligation would be 1,295 MW.

WITNESS: John F Torpey

Kentucky Power Company

REQUEST

Kentucky Power's response to Item 30.a. of Staff's First Request provides the Commission with PJM's Installed Reserve Margin of 15.6 percent. Kentucky Power states that its peak that is coincident with the PJM peak is the relevant data point when considering its obligation. For the previous five years, provide the calendar dates of the relative data point used when considering Kentucky Power's obligation.

RESPONSE

Loads at the time of PJM's RTO five peak days are used in development of the Peak Load Contribution (PLC), which is used to derive the load obligation for load serving entities within each zone of PJM. Staff 2-20 Attachment 1 provides the peak days and peak hours (in Eastern Prevailing Time) for the five peak days of PJM for 2008 through 2012.

WITNESS: John F Torpey

Kentucky Power Company

REQUEST

In response to Item 32 of Staff's First Request, Kentucky Power states that no FRR/RPM selection discussions occurred in the early time frame of the AEP east pool breakup. Provide records of any discussions, occurring after the early time period, concerning the future impacts the AEP east pool breakup would have on Kentucky Power's participation in the PJM market, specifically the choice to remain as a FRR participant or move to become a RPM participant.

RESPONSE

Please refer to Attachments 1 and 2 of this response for the documentation supporting Kentucky Power's decision in early 2012 to continue to elect the Fixed Resource Requirement (FRR) alternative rather than RPM for the 2015/2016 PJM Planning Year.

In addition, please refer to Attachment 1 of the Company's response to SC 1-24.

WITNESS: Ranie K Wohnhas



Interconnection Agreement (East Pool) Proposal to the Operating Committee

Date: March 6, 2012

Subject: 2015/2016 PJM FRR / RPM Capacity Election

Background

AEPSC on behalf of its East operating companies needs to advise PJM of its election as to whether its system, or the individual operating companies, will be in the RPM capacity market for PJM planning year ("PY") 2015/2016 ("15/16") which runs from June 1, 2015 through May 31, 2016, or will self-supply their RTO capacity requirements under the FRR option. Such elections are made three years in advance of the actual delivery year.

Currently and through PY 14/15 the East operating companies provide capacity as a collective group to satisfy their aggregate capacity and reserve requirements to PJM under the FRR alternative. FRR was chosen because it provides efficiencies to the East Pool Members and aligns with the bundled structure and the cost-of-service ratemaking principles of the majority of AEP's eastern states.

Developments in Ohio indicate that in the future Ohio Power ("OPCo") is unlikely to be aligned with the bundled structure and the cost-of-service ratemaking principles of the majority of AEP's eastern states. This suggests that OPCo's election for RPM or FRR for PY 15/16 should be evaluated separately from the other East operating companies. While recent Ohio Commission orders have provided uncertainty as to the exact timing of certain events, Ohio law requires OPCo to legally separate its generation business from its wires business, and it is anticipated that separation remains likely to occur prior to PY 15/16. This suggests that OPCo should elect RPM for PY 15/16.

The other East operating companies, Appalachian Power ("APCo"), Indiana Michigan Power ("I&M) and Kentucky Power ("KPCo") are not governed by the election made by OPCo for PY 15/16. FRR is still a valid and efficient choice for these companies for PY 15/16, since it is anticipated that the Pool Members other than OPCo may ultimately be parties to arrangements that would allow them to continue to elect FRR in the future. In addition, extension of the FRR election to PY 15/16 is only a one year commitment that preserves the companies' current

status and avoids unnecessary disruption. Additional capacity will be required in PY 15/16 for these companies to elect the FRR option. APCo, I&M and KPCo have several options for obtaining the necessary capacity that would permit them to elect the FRR alternative for PY 15/16.

Recommendation

Recommend that Ohio Power elect RPM for PY 15/16.

Recommend that APCo, I&M and KPCo collectively elect FRR for PY 15/16.

Support for Recommendation

- 1) Recognizing that OPCo will continue to pursue corporate separation and removal from the East Pool, RPM will give the Company the most options for implementing a full transition to market. The RPM construct also simplifies the capacity issues surrounding retail customer choice. Additionally an RPM election (versus continued FRR participation with the other AEP East Companies) will provide the Company with more flexibility regarding the ultimate disposition of its capacity resources.
- 2) At this time it is still beneficial for bundled, regulated utilities such as APCo, I&M and KPCo to self-supply their PJM capacity obligations collectively through an FRR plan. This recommendation is based upon the benefits of spreading capacity resource performance risk over a larger portfolio of resources and greater operating company resource planning flexibility. Since APCo, I&M and KPCo have elected FRR for the past eight PJM planning years, this election will only be for one planning year. Otherwise, if the Companies were to elect RPM it would be for a minimum of five PJM planning years.



**Minutes of the March 6, 2012 Meeting
of the AEP Interconnection Agreement
Operating Committee**

Present: Committee Representatives
Richard Munczinski – Pool Manager
Charles Patton – Appalachian Power Company

Counsel/Secretary
John Crespo, Esq.

Absent: Committee Representatives
Paul Chodak III – Indiana Michigan Power Company
Gregory Pauley – Kentucky Power Company
Joseph Hamrock – Ohio Power Company

The meeting was called to order at approximately 5:30 p.m. with Mr. Munczinski presiding.

Mr. Munczinski identified one proposal for Operating Committee ("Committee") consideration that was previously distributed to all of the Committee Members:

- 1) 2015/2016 PJM FRR / RPM Capacity Election (Attachment I)

The Committee Representatives present reviewed the proposal and approved the recommendation by voice vote.

The meeting was adjourned at approximately 5:45 p.m.

Pre-Meeting Note: Mr. Chodak and Mr. Pauley, due to their inability to attend the meeting, reviewed and approved the proposal by e-mail message prior to the meeting.

Post-Meeting Note: Following the meeting, Mr. Joseph Hamrock was also apprised of the Operating Committee action and indicated his approval of the proposal by e-mail message.

Kentucky Power Company

REQUEST

Refer to the response to Item 14 of the Sierra Club's Initial Set of Data Requests.

- a. In the electronic file submitted with the response, there is a worksheet titled "Confirmed Registrations 2013."
 - (1) State whether any of the customers listed on the worksheet are customers of Kentucky Power.
 - (2) If the response to Item (1) above is negative, identify the electric utility of which they are a customer.
 - (3) If the response to Item (1) above is negative, explain why Kentucky Power has provided information that is not germane to its operations.
- b. Confirm that Kentucky Power has no customers that have opted for demand response other than the Load Control Program.
- c. Explain what plans Kentucky Power has for performing an assessment of demand response.

RESPONSE

- a. (1) None of the customers listed are Kentucky Power customers.
- a. (2) See Attachment 1 to this response.
- a. (3) The information is relevant in determining the types of industries that can provide demand response and in what relative quantities. See the discussion on pages 91- 92 of Kentucky Power's 2013 IRP Report for an explanation of the methodology.
- b. Confirmed.
- c. Kentucky Power has no current plans for performing an additional assessment of demand response.

WITNESS: William K Castle

<u>Customer name</u>	<u>Utility</u>
Lowe's Home Inc	Appalachian Power Company
ANR-Paramont Coal Company-Toms Creek	Appalachian Power Company
Dominion Coal - 5211	Appalachian Power Company
ANR-Dickenson-Russell Coal Company-Dante (Moss 3) Laurel M	Appalachian Power Company
Lowe's Home Inc	Appalachian Power Company
AEP AEPSCG 3 Agg	Appalachian Power Company
CTRAH-Virginia Baptist Hospital-3300 Rivermont Ave	Appalachian Power Company
AEP AEPSCG Agg 2	Appalachian Power Company
Pulaski Community Hospital	Appalachian Power Company
Medeco	Appalachian Power Company
LOWES OF ROCKY MOUNT, VA	Appalachian Power Company
United Coal - AEP 5209	Appalachian Power Company
Dominion Coal - 8116	Appalachian Power Company
AEP AEPSCG Agg 3	Appalachian Power Company
Dominion Coal - 5221	Appalachian Power Company
Argus Energy	Appalachian Power Company
SHLD AEPSCG Agg 1	Appalachian Power Company
ANR-Republic-Surface Mine 138KV	Appalachian Power Company
ANR-Independence-Complex 69KV	Appalachian Power Company
Best Buy AEP Agg 2	Appalachian Power Company
SMC Electrical Products Inc	Appalachian Power Company
ANR-Delbarton-Complex34.5KV	Appalachian Power Company
Arch Coal	Appalachian Power Company
ANR-Mammoth-Complex 46KV	Appalachian Power Company
ANR-Road Fork-Guyandotte Mine	Appalachian Power Company
Lowe's Home Inc	Appalachian Power Company
ANR-Brooks Run Mining-Kepler Processing Company	Appalachian Power Company
Hampden Coal Co	Appalachian Power Company
SHLD AEP AEPSCG Agg 1	Appalachian Power Company
Lowe's Home Inc	Appalachian Power Company
ANR-Kingston Resources, Inc	Appalachian Power Company
ANR-Rockspring Development, Inc	Appalachian Power Company
Coal-Mac Inc-1 Whitman	Appalachian Power Company
SHLD AEP AEPSCG Agg 1	Appalachian Power Company
Lowe's Home Inc	Appalachian Power Company
Hendricks	Appalachian Power Company
St Mary Medical Center	Appalachian Power Company
ANR-Brooks Run Mining-Litwar Processing Company	Appalachian Power Company
Coal-Mac Inc-1 Ragland	Appalachian Power Company
SHLD AEPSCG Agg 1	Appalachian Power Company
Lowe's Home Inc	Appalachian Power Company
Diamond Electric Mfg Corp	Appalachian Power Company
ANR-Stirrat-Complex 46KV	Appalachian Power Company
Lowe's Home Inc	Appalachian Power Company
Lowe's Home Inc	Appalachian Power Company
ANR-Mammoth-Prep Plan 46KV	Appalachian Power Company

<u>Customer name</u>	<u>Utility</u>
Lowes Home Centers Inc	Ohio Power Company
Lowes Home Centers Inc	Ohio Power Company
Leveltek Processing LLC	Appalachian Power Company
Best Buy AEP Agg 1	Appalachian Power Company
Liberty University-1 Mountain View Rd	Appalachian Power Company
Lynchburg College	Appalachian Power Company
Liberty University-1971 University Blvd	Appalachian Power Company
CLRCH-Standard Printing Company	Ohio Power Company
CLRCH-Ohio Valley Medical Center - East Ohio Regional Hospital	Ohio Power Company
CLRCH-Ohio Valley Medical Center - East Ohio Regional Hospital	Ohio Power Company
CLRCH-Ohio Valley Medical Center - Ohio Valley Medical Center	Appalachian Power Company
SDI - Roanoke Electric Steel Econ 2013	Appalachian Power Company
SDI - Roanoke Electric Steel ERPM 2013	Appalachian Power Company
NP -Supervalu Milton Div ERPM 2013	Appalachian Power Company
City of Marietta 8th St-ERPM 2013	Ohio Power Company
City of Marietta 1954-ERPM 2013	Ohio Power Company
City of New Philadelphia 310 ERPM 2013	Ohio Power Company
City of New Philadelphia 1422 ERPM 2013	Ohio Power Company
Lane Enterprises Inc	Appalachian Power Company
Mar Bal Inc	Appalachian Power Company
Independence Lumber - 6 Sites	Appalachian Power Company
Hannah Lumber Company	Appalachian Power Company
American Red Cross - Columbus, OH	Ohio Power Company
Ohio Fresh Eggs LLC	Ohio Power Company
West Muskingum High School (150 Kimes Rd (073-534-088-0))	Ohio Power Company
Mehler Engineered Products	Appalachian Power Company
Boxley Materials - Block - 2 Sites	Appalachian Power Company
Austinville Limestone Company	Appalachian Power Company
Conwed Plastics Inc	Appalachian Power Company
Pounding Mill	Appalachian Power Company
Roth OMX - 6 Sites	Appalachian Power Company
Roth OMX - 6 Sites	Appalachian Power Company
Turman Sawmill Hillsville	Appalachian Power Company
Independence Lumber - 6 Sites	Appalachian Power Company
Wayrick Inc., Tazewell	Appalachian Power Company
The Glebe Retirement Community	Appalachian Power Company
Boxley Materials - Block - 2 Sites	Appalachian Power Company
BedfordCPS - Forest Middle School	Appalachian Power Company
Woodgrain MillworkMarion VA - 2 Sites	Appalachian Power Company
Roanoke Times - 120 Salem Avenue	Appalachian Power Company
Scholle VA	Appalachian Power Company
Turman Hardwood Flooring	Appalachian Power Company
City of Lynchburg, VA	Appalachian Power Company
Boxley	Appalachian Power Company
Boxley	Appalachian Power Company
United Salt	Appalachian Power Company

<u>Customer name</u>	<u>Utility</u>
Municipal South	Appalachian Power Company
RockTenn Paperboard Lynchburg	Appalachian Power Company
BedfordCPS - Thomas Jefferson Elementary	Appalachian Power Company
Pepsi - Wytheville	Appalachian Power Company
Salem Stone Corporation	Appalachian Power Company
Cardinal IG Co Vinton VA	Appalachian Power Company
CBL	Appalachian Power Company
The Mennel Milling Company - Roanoke__Econ	Appalachian Power Company
The Mennel Milling Company - Roanoke	Appalachian Power Company
Ion Media Networks - 5 sites	Appalachian Power Company
Ferguson Land Lumber Company	Appalachian Power Company
Adams Construction - 4 Sites	Appalachian Power Company
Griffin Pipe- Lynchburg AEP	Appalachian Power Company
Town of Christiansburg - Aquatic Center	Appalachian Power Company
E Dillon Company	Appalachian Power Company
Sure Wood Forest Products	Appalachian Power Company
Pounding Mill	Appalachian Power Company
Independence Lumber - 6 Sites	Appalachian Power Company
Cave Spring Baptist Church	Appalachian Power Company
Boxley	Appalachian Power Company
Adams Construction - 4 Sites	Appalachian Power Company
Salem Stone Corporation	Appalachian Power Company
Hopkins Lumber - Ridgeway	Appalachian Power Company
Town of Christiansburg - Recreation Center	Appalachian Power Company
American Wood Fibers	Appalachian Power Company
Ferguson Land Lumber Company	Appalachian Power Company
Corning Inc Blacksburg VA	Appalachian Power Company
Adams Construction - 4 Sites	Appalachian Power Company
Ten Oaks	Appalachian Power Company
Boxley	Appalachian Power Company
Salem Stone Corporation	Appalachian Power Company
Frank Chervan Inc	Appalachian Power Company
Ferguson Land Lumber Company	Appalachian Power Company
General Shale Webster Inc (Roanoke)	Appalachian Power Company
Turman Hardwood Flooring	Appalachian Power Company
Banker Steel	Appalachian Power Company
Hutchinson Sealing Systems	Appalachian Power Company
Ion Media Networks - 5 sites	Appalachian Power Company
River Ridge Mall CBL	Appalachian Power Company
United Coal Company Wellmore Coal#7 and #8 Prep Plants	Appalachian Power Company
Hometown Ice LOA	Appalachian Power Company
General Shale Products LLC (Marion)	Appalachian Power Company
Pepsi Bottling Group - Roanoke, VA	Appalachian Power Company
Woodgrain MillworkMarion VA - 2 Sites	Appalachian Power Company
RR Donnelley	Appalachian Power Company
Roanoke Times - 201 Campbell Avenue	Appalachian Power Company

<u>Customer name</u>	<u>Utility</u>
Frontier-Logan WV	Appalachian Power Company
ATandT Services Inc	Appalachian Power Company
United Coal Company AEP	Appalachian Power Company
Clonch Industries	Appalachian Power Company
United Coal Company - Pocahontas Coal - Lily Brook Road__Ecor	Appalachian Power Company
United Coal Company Pocahontas Coal	Appalachian Power Company
WSAZ - TV 3 - ELRP	Appalachian Power Company
Maple Coal	Appalachian Power Company
United Coal Company Pocahontas Coal State Rt 33	Appalachian Power Company
Huntington Sanitary Board WWTP	Appalachian Power Company
ATandT Services Inc	Appalachian Power Company
Charleston Civic Center	Appalachian Power Company
ATandT Services Inc	Appalachian Power Company
City of Nitro - 2 Sites	Appalachian Power Company
Putnam Public Service District	Appalachian Power Company
Montgomery General Hospital	Appalachian Power Company
Allegheny Wood Products Princeton	Appalachian Power Company
Frontier-St. Albans WV	Appalachian Power Company
ATandT Services Inc	Appalachian Power Company
Beckley Complex	Appalachian Power Company
ATandT Services Inc	Appalachian Power Company
Ion Media Networks Charleston	Appalachian Power Company
Alleward Sogefi - Prichard, WV	Appalachian Power Company
Allegheny Wood Products Princeton - 2 Sites	Appalachian Power Company
Frontier-Huntington WV (6th Ave)	Appalachian Power Company
City of Nitro - 2 Sites	Appalachian Power Company
US Food Service Hurricane	Appalachian Power Company
New River Hardwoods	Appalachian Power Company
Frontier-Beckley WV	Appalachian Power Company
Allegheny Wood Products Princeton - 2 Sites	Appalachian Power Company
ATandT Services Inc	Appalachian Power Company
Frontier-Huntington WV (Pea Ridge Rd)	Appalachian Power Company
Star Plastics - 3 Sites	Appalachian Power Company
Charleston Newspapers	Appalachian Power Company
Home City Ice	Appalachian Power Company
Thomas Memorial Hospital	Appalachian Power Company
Facemyer Resources	Appalachian Power Company
ATandT Services Inc	Appalachian Power Company
CCSD - Kingswood Data Center	Ohio Power Company
WCSD - Wilder Elem - 2 Sites	Ohio Power Company
Wincup OH	Ohio Power Company
Ohio Fresh Eggs LLC	Ohio Power Company
City of Delaware Water Treatment Plant	Ohio Power Company
Hilliard City SD - Scioto Darby Elementary - 2 Sites	Ohio Power Company
New Albany Elementary School	Ohio Power Company
CCSD - Briggs HS	Ohio Power Company

<u>Customer name</u>	<u>Utility</u>
CCSD - Briggs HS	Ohio Power Company
SYGMA - Columbus	Ohio Power Company
Worthington City Schools - Thomas Worthington	Ohio Power Company
ATT - AEP - 5	Ohio Power Company
DataCenter.BZ	Ohio Power Company
ATT - AEP - 20 - 5 Sites	Ohio Power Company
Worthington City Schools - Perry Middle - 2 Sites	Ohio Power Company
Hilliard City SD - Scioto Darby Elementary - 2 Sites	Ohio Power Company
Sonoco - New Albany OH	Ohio Power Company
ATT - AEP - 17	Ohio Power Company
Delaware County Ohio Regional Sewer District - Alum Creek Purr	Ohio Power Company
Reynoldsburg City SD - Livingston High School	Ohio Power Company
CCSD - Downtown HS	Ohio Power Company
Delaware County Ohio Regional Sewer District - Alum Creek/Wa	Ohio Power Company
ATT - AEP - 19	Ohio Power Company
Facemyer Forest ProductsOhio - 4 Sites	Ohio Power Company
City of Columbus-Morse East - 4 Sites	Ohio Power Company
Big Walnut High School	Ohio Power Company
Mondo Polymer Technologies - 8 Sites	Ohio Power Company
Foote Foundry - 2 sites	Ohio Power Company
Mondo Polymer Technologies - 8 Sites	Ohio Power Company
WCSD - Wilder Elem - 2 Sites	Ohio Power Company
Hamilton Elementary School	Ohio Power Company
Olentangy SD - Orange Middle School	Ohio Power Company
Frontier-Circleville OH	Ohio Power Company
Adena Regional Medical Center	Ohio Power Company
Olentangy SD - Berkshire Middle School	Ohio Power Company
Reynoldsburg City SD - Hannah Ashton Middle School - 3 Sites	Ohio Power Company
Hilliard City SD- Tharp Sixth Grade School - 3 Sites	Ohio Power Company
Sonoco - New Albany OH	Ohio Power Company
Ohio Fresh Eggs LLC	Ohio Power Company
Olentangy SD - Liberty High School	Ohio Power Company
New Albany Middle School	Ohio Power Company
Burr Oak - Well Field	Ohio Power Company
ATT - AEP - 22	Ohio Power Company
Ohio Fresh Eggs LLC - 3 Sites	Ohio Power Company
ATT - AEP - 20 - 5 Sites	Ohio Power Company
Hilliard City SD - Heritage Middle School	Ohio Power Company
City of Columbus-Cleveland	Ohio Power Company
CCSD - Mifflin HS	Ohio Power Company
CCSD - Mifflin HS	Ohio Power Company
ATT - AEP - 6	Ohio Power Company
Reynoldsburg City SD - Slate Ridge Elementary	Ohio Power Company
CCSD - Eastmoor HS	Ohio Power Company
Battelle Memorial Institute - King Ave	Ohio Power Company
Worthington City Schools - Perry Middle - 2 Sites	Ohio Power Company

<u>Customer name</u>	<u>Utility</u>
RR Donnelley	Ohio Power Company
Menards 3273 - COLUMBUS, OH	Ohio Power Company
CCSD - Marion Franklin HS	Ohio Power Company
Sidwell - 4 Sites	Ohio Power Company
Hamilton Educational Service Center	Ohio Power Company
Allied Mineral - all bldgs	Ohio Power Company
Worthington City Schools - McCord - 2 Sites	Ohio Power Company
Ross County	Ohio Power Company
Reynoldsburg City SD - Taylor Road Elem	Ohio Power Company
Cloverleaf Columbus OH	Ohio Power Company
Capital City Ice	Ohio Power Company
Worthington City Schools - Worthingway	Ohio Power Company
ATT - AEP - 20 - 5 Sites	Ohio Power Company
CCSD - New AIMS	Ohio Power Company
CCSD - Whetstone HS	Ohio Power Company
ATT - AEP - 20 - 5 Sites	Ohio Power Company
Ohio Fresh Eggs LLC	Ohio Power Company
Del-Co	Ohio Power Company
Mount Carmel Health	Ohio Power Company
Amer Bath Sewage TMT - 6 Sites	Ohio Power Company
DCSD Hayes High School	Ohio Power Company
Adams County Regional Medical Center	Ohio Power Company
Olentangy SD -Liberty Middle School	Ohio Power Company
Dayton Rogers of Ohio Inc	Ohio Power Company
Mondo Polymer Technologies - 8 Sites	Ohio Power Company
Reynoldsburg City SD - Hannah Ashton Middle School - 3 Sites	Ohio Power Company
McGraw Hill - Orion	Ohio Power Company
Sonoco - New Albany OH	Ohio Power Company
Hamilton Intermediate School	Ohio Power Company
Worthington City Schools - Kilbourne Middle	Ohio Power Company
CCSD - Franklin MS	Ohio Power Company
Hilliard City SD - Davidson High School	Ohio Power Company
Worthington City Schools - McCord - 2 Sites	Ohio Power Company
Hilliard City SD- Tharp Sixth Grade School - 3 Sites	Ohio Power Company
Del-Co	Ohio Power Company
Ashland Inc-Chemical-Dublin	Ohio Power Company
CCSD - Walnut Ridge HS	Ohio Power Company
Sonoco - Columbus,OH Unit A	Ohio Power Company
ATT - AEP - 24	Ohio Power Company
Ohio Dominican University	Ohio Power Company
Delaware County Ohio Regional Sewer District - OECC	Ohio Power Company
Facemyer Forest ProductsOhio - 4 Sites	Ohio Power Company
DCSD Dempsey Middle School	Ohio Power Company
Reynoldsburg City SD - Waggoner Road Middle - 2 Sites	Ohio Power Company
Hilliard City SD- Tharp Sixth Grade School - 3 Sites	Ohio Power Company
CORE MOLDING TECHNOLOGIES, INC	Ohio Power Company

Customer name

Utility

Flexmag Industries Inc	Ohio Power Company
Hilliard City SD - Darby High School	Ohio Power Company
DCSD Willis Intermediate School	Ohio Power Company
ATT - AEP - 21	Ohio Power Company
CCSD - Beechcroft HS	Ohio Power Company
Mount Carmel	Ohio Power Company
City of Columbus-Henderson	Ohio Power Company
Leo Yassenoff Jewish Community Center Of Greater Columbus	Ohio Power Company
Worthington City Schools - Sutter Park - 3 Sites	Ohio Power Company
CCSD - Hudson Dist. Center	Ohio Power Company
Worthington City Schools - Sutter Park - 3 Sites	Ohio Power Company
Ames True Temper Dexter City - 2 Sites	Ohio Power Company
Worthington City Schools - Worthington Kilbourne	Ohio Power Company
WCSD - Central HS	Ohio Power Company
EWI	Ohio Power Company
Worthington City Schools - Sutter Park - 3 Sites	Ohio Power Company
Diagnostic Hybrids	Ohio Power Company
Worthington City Schools - Admin Offices	Ohio Power Company
Olentangy SD - Olentangy Orange High School	Ohio Power Company
Allied Mineral - all bldgs	Ohio Power Company
WCSD - Genoa	Ohio Power Company
Ames True Temper Dexter City - 2 Sites	Ohio Power Company
Interstate Cold - Roberts	Ohio Power Company
ATT - AEP - 16	Ohio Power Company
Del-Co	Ohio Power Company
Magnum Magnetics Magnetic Specialty LLC	Ohio Power Company
Visteon Corporation Benton Harbor	Indiana Michigan Power Company
Visteon Corporation Crystal	Indiana Michigan Power Company
Wastewater Treatment Plant	#N/A
Portola Packaging	#N/A
Aggregates USA LLC - 2 Sites	#N/A
Air Products - Kingsport, TN	#N/A
Water Treatment Plant	#N/A
Hillcrest Pump Station	#N/A
Raw Water Intake	#N/A
Aggregates USA LLC - 2 Sites	#N/A
BAE Systems - Holston Army Ammunition Plant	#N/A
WPCP City of Wooster	Ohio Power Company
Morgan Local School District - High School	Ohio Power Company
Ohio Coatings Co	Ohio Power Company
CCSD - Coshocton High School	Ohio Power Company
Heidelberg - Miller	Ohio Power Company
City Laundry	Ohio Power Company
City of Lima Dp 9 WWTP	Ohio Power Company
Bridgestone AVD Plant - 235 Commerce Way	Ohio Power Company
Essroc Middlebranch	Ohio Power Company

Customer name

Utility

Mount Vernon WTP	Ohio Power Company
Advanced Fiber Technology-ELRP	Ohio Power Company
Magnum Magnetics Magnetic Specialty LLC	Ohio Power Company
PSC Metals - Wooster	Ohio Power Company
Midwest Industries Inc.	Ohio Power Company
RR Donnelley Hebron OH	Ohio Power Company
National Lime and Stone Lima	Ohio Power Company
Findlay Machine and Tool	Ohio Power Company
Rosebud Mining - Tusky Mine and Prep	Ohio Power Company
National Lime and Stone Bucyrus	Ohio Power Company
Superior Clay Corp	Ohio Power Company
M&B Asphalt	Ohio Power Company
Mount Vernon WWTP	Ohio Power Company
Longaberger - 6 Sites	Ohio Power Company
International Automotive	Ohio Power Company
Laminate Technologies	Ohio Power Company
Arboris, LLC - 4 Sites	Ohio Power Company
City of Columbus-Morse East - 4 Sites	Ohio Power Company
M-Tek	Ohio Power Company
Ampacet	Ohio Power Company
Crooksville Exempted School District - High School	Ohio Power Company
POET Biorefining - Fostoria	Ohio Power Company
Amer Bath Sewage TMT - 6 Sites	Ohio Power Company
Newark WWTP and Sewer System	Ohio Power Company
Stark State College	Ohio Power Company
Case Farms Processing	Ohio Power Company
CCSD - Allen Elementary School	Ohio Power Company
Guardian Lima	Ohio Power Company
Sonoco - Canton, OH	Ohio Power Company
Bridgestone AVD Plant - 235 Commerce Way	Ohio Power Company
LCSO - Calumet Ave	Ohio Power Company
Longaberger	Ohio Power Company
Facemyer Forest ProductsOhio - 4 Sites	Ohio Power Company
Foote Foundry	Ohio Power Company
ATT - AEP - 13	Ohio Power Company
Millwood Ae Creek Plant Mn Bldg Mtr #1	Ohio Power Company
City of Cambridge	Ohio Power Company
Burnham Corp	Ohio Power Company
Graham Packaging Findlay OH	Ohio Power Company
Mondo Polymer Technologies - 8 Sites	Ohio Power Company
Bridgestone AVD Plant - 235 Commerce Way	Ohio Power Company
New Lexington City SD - Elementary School	Ohio Power Company
Newark Group - Ohio__Econ	Ohio Power Company
Newark Group Ohio	Ohio Power Company
BUCKEYE CONTAINER CO	Ohio Power Company
International Automotive Components (AC) North America	Ohio Power Company

Customer name

Utility

Sonoco - Tiffin, OH	Ohio Power Company
Carmeuse Lime and Stone, Inc.	Ohio Power Company
Longaberger - 6 Sites	Ohio Power Company
CCSD - Lehman Middle School	Ohio Power Company
Gross Lumber Inc	Ohio Power Company
CCSD - Belden School	Ohio Power Company
Reynoldsburg City SD - Reynoldsburg High School (Summit camp	Ohio Power Company
Reynoldsburg City SD - Reynoldsburg High School (Summit camp	Ohio Power Company
Mattingly Foods Inc	Ohio Power Company
Mondo Polymer Technologies - 8 Sites	Ohio Power Company
Fresh Mark - Canton	Ohio Power Company
Home City Ice	Ohio Power Company
GREGORY INDUSTRIES INC	Ohio Power Company
Stark State College - 3 Sites	Ohio Power Company
Tri-Valley Local Schools	Ohio Power Company
Tri-Valley Local Schools - 2 Sites	Ohio Power Company
LCSD - Cable Rd.	Ohio Power Company
Boltaron Performance Products LLC	Ohio Power Company
Molten-Findlay	Ohio Power Company
Herbert E Orr Co - 2 Sites	Ohio Power Company
Kenyon College	Ohio Power Company
Biery Cheese	Ohio Power Company
Water Treatment City of Wooster	Ohio Power Company
Sidwell - 4 Sites	Ohio Power Company
City of Cambridge	Ohio Power Company
Monogram Metals	Ohio Power Company
Stark State College - 5 Sites	Ohio Power Company
Amer Bath Sewage TMT - 6 Sites	Ohio Power Company
Lawrence County - WWTP	Ohio Power Company
Scioto County Regional Water District No 1	Ohio Power Company
RTH Processing Meter 1	Ohio Power Company
Heinz N 5th St Fremont OH	Ohio Power Company
National Lime and Stone Findlay	Ohio Power Company
Longaberger	Ohio Power Company
CCSD - Clarendon School	Ohio Power Company
CCSD - Cedar Elementary School	Ohio Power Company
Twin City Hospital - 2 Sites	Ohio Power Company
International Automotive Components - Fremont, OH__Econ	Ohio Power Company
International Automotive Components (AC) North America	Ohio Power Company
Yoder Lumber Township Road	Ohio Power Company
LCSD - Saint John Ave	Ohio Power Company
M&B Asphalt	Ohio Power Company
Tri-Valley Local Schools	Ohio Power Company
Sidwell - 4 Sites	Ohio Power Company
Alamo Group Inc The Gradall Company	Ohio Power Company
Rosebud Mining - Vail	Ohio Power Company

Customer name

Utility

Lafarge Paulding	Ohio Power Company
CCSD - Arts Academy/Summit	Ohio Power Company
CCSD - Timken Campus	Ohio Power Company
Tiffin University - Gillmor Student Center	Ohio Power Company
Menards 3214 - MARION, OH	Ohio Power Company
Longaberger - 6 Sites	Ohio Power Company
Republic Steel Canton Ohio	Ohio Power Company
Constar International Hebron Ohio	Ohio Power Company
POET Biorefining - Leipsic	Ohio Power Company
D S Brown	Ohio Power Company
City of Columbus-Morse East - 4 Sites	Ohio Power Company
SOLMET TECHNOLOGIES INC	Ohio Power Company
Webster Industries	Ohio Power Company
RR Donnelley Willard OH	Ohio Power Company
Tri-Valley Local Schools - 2 Sites	Ohio Power Company
Tri-Valley Local Schools - 2 Sites	Ohio Power Company
Bucyrus - WWTP	Ohio Power Company
Mondo Polymer Technologies - 8 Sites	Ohio Power Company
Sidwell Saint Clairsville - 2 Sites	Ohio Power Company
Facemyer Forest ProductsOhio - 4 Sites	Ohio Power Company
Tri-Valley Local Schools - 2 Sites	Ohio Power Company
Herbert E Orr Co - 2 Sites	Ohio Power Company
Sonoco - Tiffin, OH	Ohio Power Company
Longaberger - 6 Sites	Ohio Power Company
Foote Foundry - 2 sites	Ohio Power Company
Stark State College - 5 Sites	Ohio Power Company
ESCO/Bucyrus Blades	Ohio Power Company
The Mennel Milling Company - Fostoria__Econ	Ohio Power Company
The Mennel Milling Company - Fostoria	Ohio Power Company
Beaver Wood Products - 2 Sites	Ohio Power Company
LCSD - 700 E North - 3 Story - 3 Sites	Ohio Power Company
Millwood Apple Creek - 3 Sites	Ohio Power Company
CCSD - Crenshaw Middle School	Ohio Power Company
Constar International Hebron Ohio	Ohio Power Company
Heidelberg - Campus Center	Ohio Power Company
Heidelberg - France	Ohio Power Company
Technibus (Canton, OH)	Ohio Power Company
Arboris, LLC - 4 Sites	Ohio Power Company
Reynoldsburg City SD - Waggoner Road Middle - 2 Sites	Ohio Power Company
Maysville Local School District - 3725 Panther Dr.	Ohio Power Company
Kenyon College	Ohio Power Company
Heritage Plastics	Ohio Power Company
Frontier-New Philadelphia OH	Ohio Power Company
Denison University	Ohio Power Company
Millwood Apple Creek - 3 Sites	Ohio Power Company
Kalmbach Feeds - 7148 State Highway 199	Ohio Power Company

Customer name

Utility

ATT - AEP - 12	Ohio Power Company
Roth OMX - 5 Sites	Ohio Power Company
Roth OMX - 5 Sites	Ohio Power Company
Roth OMX - 5 Sites	Ohio Power Company
Roth OMX - 5 Sites	Ohio Power Company
ATT - AEP - 7	Ohio Power Company
ATT - AEP - 1	Ohio Power Company
Frontier-Minerva OH	Ohio Power Company
Twin City Hospital	Ohio Power Company
Roth OMX - 5 Sites	Ohio Power Company
East Muskingum Middle School - 3 sites	Ohio Power Company
Shawnee #2 TMT Plant	Ohio Power Company
EWI - 3 Sites	Ohio Power Company
Scioto County Regional Water District No 1 326 Robert Lucas Rd	Ohio Power Company
Mondo Polymer Technologies - 8 Sites	Ohio Power Company
East Muskingum Middle School - 3 sites	Ohio Power Company
Sidwell - 4 Sites	Ohio Power Company
Water Treatment City of Wooster	Ohio Power Company
Amer Bath Sewage TMT - 6 Sites	Ohio Power Company
Office Max - 3 Sites	Ohio Power Company
Arboris, LLC - 4 Sites	Ohio Power Company
Stark State College - 3 Sites	Ohio Power Company
Office Max - 3 Sites	Ohio Power Company
Frontier-Portsmouth OH	Ohio Power Company
Water Treatment City of Wooster	Ohio Power Company
Allen Co. Sanitary Engr	Ohio Power Company
ATT - AEP - Aggregation	Ohio Power Company
West Muskingum - Middle School (100 Kimes Rd (079-978-002-C	Ohio Power Company
Frontier-Moundsville WV	Appalachian Power Company
Frontier-Wheeling WV (Park Pl)	Appalachian Power Company
Frontier-Wheeling WV (Chapline St)	Appalachian Power Company
The Mennel Milling Company - Dowagiac	Indiana Michigan Power Company
Virginia Castings	Appalachian Power Company
USPS Columbus Citygate	Ohio Power Company
AK Steel Coshocton	Ohio Power Company
AK Steel-Zanesville	Ohio Power Company
South Bend Water Works	Indiana Michigan Power Company
South Bend Water Works 2013	Indiana Michigan Power Company
City of Fort Wayne 2013	Indiana Michigan Power Company
Indiana Wesleyan University 2013	Indiana Michigan Power Company
City of Fort Wayne 2013	Indiana Michigan Power Company
Ultimate Ethanol LLC 2013	Indiana Michigan Power Company
Parkview Hospital North 2013	Indiana Michigan Power Company
Indiana Wesleyan University 2013	Indiana Michigan Power Company
Interstate Cold Storage 2013	Indiana Michigan Power Company
Atlas Foundry Company Inc 2013	Indiana Michigan Power Company

Customer name

Utility

Village of New Albany SJ Lumber DR 13-14	Ohio Power Company
Village of New Albany SJ Lumber DR 13-14	Ohio Power Company
Motorists Mutual Insurance Company 1 DR 13-14	Ohio Power Company
Gallipolis City Schools DR 13-14	Ohio Power Company
Village of New Albany SJ Lumber DR 13-14	Ohio Power Company
Plating Technology 1-2 DR 13-14	Ohio Power Company
Gallipolis City Schools 3 DR 13-14	Ohio Power Company
Dowsco PXP DR 13-14	Ohio Power Company
City of Columbus - Fleet Management DR 13-14	Ohio Power Company
Ohio Valley Veneer 1-2 DR 13-14	Ohio Power Company
Nationwide Arena DR 13-14	Ohio Power Company
City of Columbus - Optimum - Xpedx DR 13-14	Ohio Power Company
City of Columbus - Optimum - Xpedx DR 13-14	Ohio Power Company
ODRC - RCI 1 DR 13-14	Ohio Power Company
City of Columbus - Building Services DR 13-14	Ohio Power Company
Hidaka USA DR 13-14	Ohio Power Company
Motorists Mutual Ins Optimum System DR 13-14	Ohio Power Company
ODRC - RCI 2 DR 13-14	Ohio Power Company
ODRC - FPRC DR 13-14	Ohio Power Company
ODRC - RCI 3-4 DR 13-14	Ohio Power Company
Burton Metals DR 13-14	Ohio Power Company
Midwest Acoust-A-Fiber DR 13-14	Ohio Power Company
Hopkins Printing DR 13-14	Ohio Power Company
Spirit Services DR 13-14	Ohio Power Company
Motorists Mutual Ins Optimum System DR 13-14	Ohio Power Company
ODRC - CCI 1 DR 13-14	Ohio Power Company
ODRC - HCF DR 13-14	Ohio Power Company
Old Trail Printing 2-3 DR 13-14	Ohio Power Company
Marketing Services Vectra 2 DR 13-14	Ohio Power Company
Holzer Medical Center DR 13-14	Ohio Power Company
Village of New Albany SJ Lumber DR 13-14	Ohio Power Company
Fine Line Graphics DR 13-14	Ohio Power Company
ODRC - CRC DR 13-14	Ohio Power Company
Motorists Mutual Ins Optimum System DR 13-14	Ohio Power Company
Bricker&Eckler LLC DR 13-14	Ohio Power Company
Latham Limestone DR 13-14	Ohio Power Company
Alexander Local Schools DR 13-14	Ohio Power Company
City of Columbus - Civil Service Commission 13-14	Ohio Power Company
Superior Hardwoods of Ohio DR 13-14	Ohio Power Company
Plating Technology 3 DR 13-14	Ohio Power Company
Dowsco PXP DR 13-14	Ohio Power Company
ODRC - RCI 3-4 DR 13-14	Ohio Power Company
Marketing Services Vectra 1 DR 13-14	Ohio Power Company
Ohio Valley Veneer 1-2 DR 13-14	Ohio Power Company
Old Trail Printing 2-3 DR 13-14	Ohio Power Company
Cimbar Minerals LLC DR 13-14	Ohio Power Company

Customer name

Utility

Hollins University - AEP - Registration: 1	Appalachian Power Company
Clorox Services Company as agent to Clorox Products Manufactu	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 7	Appalachian Power Company
Marriott International, Inc - AEP - Registration: 1	Appalachian Power Company
Target Corporation - AEP - Registration: 3	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 17	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 14	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 17	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 10	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 1	Appalachian Power Company
Forest City Sustainable Resources, LLC - AEP - Registration: 1	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 5	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 12	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 3	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 11	Appalachian Power Company
Forest City Sustainable Resources, LLC - AEP - Registration: 1	Appalachian Power Company
Target Corporation - AEP - Registration: 6	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 17	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 1	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 1	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 15	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 1	Appalachian Power Company
Forest City Sustainable Resources, LLC - AEP - Registration: 1	Appalachian Power Company
Wal-Mart Stores, Inc - AEP - Registration: 9	Appalachian Power Company
Home Depot USA, Inc-1-1546225337	Ohio Power Company
Wal-Mart Stores, Inc - AEP - Registration: 44	Ohio Power Company
Macys Inc - AEP - Registration: 4	Ohio Power Company
Wal-Mart Stores, Inc - AEP - Registration: 35	Ohio Power Company
Wal-Mart Stores, Inc - AEP - Registration: 33	Ohio Power Company
Home Depot USA, Inc-1-1546225337	Ohio Power Company
Target Corporation-1013791501	Ohio Power Company
Wal-Mart Stores, Inc - AEP - Registration: 58	Ohio Power Company
Wal-Mart Stores, Inc - AEP - Registration: 59	Ohio Power Company
Home Depot USA, Inc-1-1546225337	Ohio Power Company
Citicorp North America- Inc- - NE1022110200	Ohio Power Company
Target Corporation-1027489600	Ohio Power Company
Wal-Mart Stores, Inc - AEP - Registration: 70	Ohio Power Company
Wal-Mart Stores, Inc - AEP - Registration: 72	Ohio Power Company
Macys Inc - AEP - Registration: 4	Ohio Power Company
Wal-Mart Stores, Inc - AEP - Registration: 65	Ohio Power Company
Citicorp North America Inc	Ohio Power Company
Wal-Mart Stores, Inc - AEP - Registration: 24	Ohio Power Company
Wal-Mart Stores, Inc - AEP - Registration: 28	Ohio Power Company
Macys Inc - AEP - Registration: 1	Ohio Power Company
Hanson Aggregates Davon LLC-NE1044178202	Ohio Power Company
Target Corporation-1051515791	Ohio Power Company

Customer name

Staples, Inc - AEP - Registration: 1
PETCO Animal Supplies Stores, Inc - AEP - Registration: 1
Staples, Inc-1-1605770051
Staples, Inc-1-1605770051
Staples, Inc-1-1605770051
Staples, Inc-1-1605770051
Staples, Inc-1-1605770051
PETCO Animal Supplies Stores, Inc - AEP - Registration: 1
Big Lots - 0061
Eastman Chemical - Kingsport
Air Products - Kingsport
Linde
Air Products - Moundsville
Bristol Virginia Utilities Board Water Filtration Plant 2013
AMCOR Ridgid Plastics USA 2013
Magnolia Manufacturing Co Inc 2013
Jefferson Yarns Inc
W R MEADOWS INC
Parkdale America
PCC-Huntington Alloys 2013
AEP - 1 Riverside Plaza
AEP - 1 Riverside Plaza

Utility

Indiana Michigan Power Company
Ohio Power Company
Appalachian Power Company
#N/A
#N/A
Ohio Power Company
Appalachian Power Company
Ohio Power Company
Ohio Power Company

Kentucky Power Company

REQUEST

Provide by month for 2013 the number of customers participating and renewable energy certificates purchased in Kentucky Power's Rider G.P.O. (Green Pricing Option Rider) tariff.

RESPONSE

No customers participated in the Green Pricing Option Rider in 2013, and there were no renewable energy certificates purchased.

WITNESS: Ranie K Wohnhas